

Listing of Claims:

1-13 (canceled).

14 (currently amended). An assembly for transferring current, the assembly comprising:

at least one electrically conductive slip ring;

a plurality of electrically conductive brushes for supplying current to the at least one slip ring, each of the electrically conductive brushes being coupled through an electrical connection to a respective one of the electrically conductive brushes through a common electrical interface;

at least one electrically conductive lead coupled to the common electrical interface;

a plurality of inductors, each situated on a respective one of the electrical connections for modifying a self-inductance of the respective electrical connection.

15 (currently amended). An assembly for transferring current, the assembly comprising:

at least one electrically conductive slip ring;

a plurality of electrically conductive brushes for supplying current to the at least one slip ring, each of the electrically conductive brushes being coupled through an electrical connection to a respective one of the electrically conductive brushes through a common electrical interface;

at least one electrically conductive lead coupled to the common electrical interface;

a plurality of inductors, each situated on a respective one of the electrical connections. ~~The assembly of claim 14~~ wherein each of the inductors is positioned in a parallel current path for increasing a self inductance of the respective parallel current path by at least one order of magnitude.

16 (original). The assembly of claim 15 wherein each one of the inductors has an inductance that is substantially equal to inductances of each of the other inductors.

17 (currently amended). An assembly for transferring current, the assembly comprising:

at least one electrically conductive slip ring;

a plurality of electrically conductive brushes for supplying current to the at least one slip ring, each of the electrically conductive brushes being coupled through an electrical connection to a respective one of the electrically conductive brushes through a common electrical interface;

at least one electrically conductive lead coupled to the common electrical interface;

a plurality of inductors, each situated on a respective one of the electrical connections; ~~The assembly of claim 14~~ further including

at least one electrically conductive lead coupled to the common electrical interface, wherein at least one of the inductors is situated closer to the at least one electrically conductive lead and has a higher inductance value than at least one other of the inductors situated farther from the at least one electrically conductive lead.

18 (currently amended). An assembly for transferring current, the assembly comprising:

at least one electrically conductive slip ring;

a plurality of electrically conductive brushes for supplying current to the at least one slip ring, each of the electrically conductive brushes being coupled through an electrical connection to a respective one of the electrically conductive brushes through a common electrical interface;

at least one electrically conductive lead coupled to the common electrical interface;

a plurality of inductors, each situated on a respective one of the electrical connections. ~~The assembly of claim 17~~ wherein each inductor comprises an adjustable variable inductance inductor.

19 (original). The assembly of claim 18 wherein each inductor comprises a coil form, a winding wound on the coil form, and an adjustable position magnetic core.

20 (original). The assembly of claim 19 further including a plurality of voice coil actuators for controlling the positions of the adjustable magnetic cores.

21-35 (canceled).

36 (currently amended). A method for fabricating an assembly for transferring current, the method comprising:

coupling a plurality of electrically conductive brushes for supplying current to at least one electrically conductive slip ring through a plurality of respective electrical connections to adjacent ones of the electrically conductive brushes through a common electrical interface;

coupling at least one electrically conductive lead to the common electrical interface;

situating a plurality of inductors, each on a respective one of the electrical connections for modifying a self-inductance of the respective electrical connection.

37 (currently amended). A method for fabricating an assembly for transferring current, the method comprising:

coupling a plurality of electrically conductive brushes for supplying current to at least one electrically conductive slip ring through a plurality of respective electrical connections to adjacent ones of the electrically conductive brushes through a common electrical interface;

coupling at least one electrically conductive lead to the common electrical interface;

situating a plurality of inductors, each on a respective one of the electrical connections ~~The method of~~

~~claim 36 wherein situating the plurality of inductors, each on a respective one of the electrical connections, comprises situating each of the inductors in a parallel current path for increasing a self inductance of the respective parallel current path by at least one order of magnitude.~~

38 (original). The method of claim 37 wherein each one of the inductors has an inductance that is substantially equal to each of the other inductors.

39 (currently amended). A method for fabricating an assembly for transferring current, the method comprising:

coupling a plurality of electrically conductive brushes for supplying current to at least one electrically conductive slip ring through a plurality of respective electrical connections to adjacent ones of the electrically conductive brushes through a common electrical interface;

coupling at least one electrically conductive lead to the common electrical interface;

situating a plurality of inductors, each on a respective one of the electrical connections with ~~The method of claim 36 wherein situating the plurality of inductors, each on a respective one of the electrical connections, comprises situating~~ at least one of the inductors closer to the at least one electrically conductive lead than at least one other of the inductors, the at least one of the inductors having a higher inductance value than the at least one other of the inductors.

40 (currently amended). A method for fabricating an assembly for transferring current, the method comprising:

coupling a plurality of electrically conductive brushes for supplying current to at least one electrically conductive slip ring through a plurality of respective electrical connections to adjacent ones of the electrically conductive brushes through a common electrical interface;

coupling at least one electrically conductive lead to the common electrical interface;

situating a plurality of inductors, each on a respective one of the electrical connections; ~~The method of claim 39 further including, after situating the plurality of inductors,~~
adjusting an inductance of at least one of the inductors.

41-49 (canceled).